

ABSTRACT

An engineered carbonaceous material (ECM) comprising a mixture of synthetic graphite and one or more other graphite, such as natural flake graphite, natural vein graphite, and/or amorphous graphite. The objects are also achieved by an ECM comprising a mixture of expanded graphite and one or more other graphite materials, such as natural flake graphite, natural vein graphite, amorphous graphite and/or synthetic graphite. The ECM is preferably mixed with 0.01 to 20.0 wt. % MnO_2 to create a battery active material. The mixtures may be made by either co-blending or co-grinding the graphites together. An electrochemical cell incorporating the material is also contemplated.